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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/608,187	06/30/2003	Heume Il Back	049128-5114	8785

9629 7590 08/29/2006

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WASHINGTON, DC 20004

EXAMINER
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PIZIALI, JEFFREY J

ART UNIT	PAPER NUMBER
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2629

DATE MAILED: 08/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center"><b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b></p>	<b>Application No.</b> 10/608,187	<b>Applicant(s)</b> BAEK ET AL.	
	<b>Examiner</b> Jeff Piziali	<b>Art Unit</b> 2629	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 11 August 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
 (b) ☐ They raise the issue of new matter (see NOTE below);  
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
 5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
 6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
 7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
 The status of the claim(s) is (or will be) as follows:  
 Claim(s) allowed: \_\_\_\_\_.  
 Claim(s) objected to: \_\_\_\_\_.  
 Claim(s) rejected: 1-3, 6 and 9-12.  
 Claim(s) withdrawn from consideration: 4, 5, 7, 8, 13 and 14.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
 12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). \_\_\_\_\_.  
 13. ☐ Other: \_\_\_\_\_.

  
 Jeff Piziali  
 22 August 2006

Continuation of 11. does NOT place the application in condition for allowance because:

The applicants are cordially thanked for the 'Request for Reconsideration Under 37 C.F.R. § 1.116' (filed 11 August 2006).

Applicants' arguments (filed 11 August 2006) have been fully considered but they are not persuasive. The applicants contend that the cited prior art of Yasuda et al (US 4,842,371 A), "merely teaches or suggests an alignment caused by polarization, but has nothing to do with an alignment caused by an external electric field" (see Page 3 of the 'Request for Reconsideration Under 37 C.F.R. § 1.116' filed 11 August 2006). However, the examiner respectfully disagrees.

Firstly, in response to applicants' argument that the reference(s) fail to show certain features of applicants' invention, it is noted that the features upon which applicant relies (i.e., "an alignment caused by an external electric field") are not recited in the rejected claim(s). All pending claims are silent on the matter of "external electric fields." Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).


Secondly, Yasuda clearly does disclose an electric field alignment method of a twisted nematic liquid crystal display device (see Column 22, Lines 17-21). The examiner does not (and did not at the time of the Office Action mailed 16 May 2006) rely upon "Column 22, Lines 17-21" of Yasuda as evidencing an electric field alignment method per se. Said portion of Yasuda has been cited mainly due to the explicit disclosure of using a twisted nematic liquid crystal material in the display device.


Yasuda states, "the electric field applied to the liquid crystal cells 1 is required to be cyclically reversed during the liquid crystal cells' lifetime" (see Column 2, Lines 3-5). Furthermore, Yasuda teaches supplying a turn-ON voltage [Fig. 4; b & c], as well as supplying voltages [Fig. 4; d] of opposite polarity to adjacent data lines while maintaining a voltage [Fig. 4; e-j] of a liquid crystal cell of the liquid crystal display device (see Column 8, Line 67 - Column 9, Line 49), as is instantly claimed. An application of voltage will inherently result in the formation of an electric field. In fact, the applicants themselves admit that Yasuda's "electric field is generated by applying voltage to common electrode and pixel electrode" (see Page 3 of the 'Request for Reconsideration Under 37 C.F.R. § 1.116' filed 11 August 2006).

Moreover, like all twisted nematic (and ferroelectric) LCDs, Yasuda's (and Saishu's) liquid crystal cells alter their molecular orientation / alignment as a direct result of the voltages / electric-fields applied thereto. If Yasuda's (or Saishu's) liquid crystal cells did not alter their molecular orientations / alignments as a result of the voltages / electric-fields applied thereto, the corresponding display device would utterly fail to function (i.e. pixels would not change from bright to dark and vice versa).

Yasuda does not expressly disclose the twisted nematic (TN) liquid crystal display could also be a ferroelectric liquid crystal (FLC) display. However, Saishu clearly does disclose using ferroelectric liquid crystal (FLC) in place of twisted nematic (TN) liquid crystal (see Column 1, Lines 20-32). Yasuda and Saishu are analogous art, because they are from the shared field of driving thin film transistors in an offset configuration for liquid crystal display devices. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to replace Yasuda's twisted nematic liquid crystal with Saishu's ferroelectric liquid crystal, so as to improve display response speed and viewing angle.

By such reasoning, rejection of the claims is deemed necessary, proper, and thereby maintained at this time.

  
Jeff Piziali  
22 August 2006

  
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